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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,594	07/10/2006	Hirokazu Taniguchi	52433/852	4328
<sup>26646</sup> KENYON & K	7590 02/05/200 ENYON LLP	EXAMINER		
ONE BROADV	VAY	YANG, JIE		
NEW YORK, N	NY 10004	ART UNIT	PAPER NUMBER	
		1793		
			MAIL DATE	DELIVERY MODE
			02/05/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)					
Office Action Commence	10/585,594	TANIGUCHI ET AL.					
Office Action Summary	Examiner	Art Unit					
	JIE YANG	1793					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on 10 Ju							
3) Since this application is in condition for allowar		secution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠ Claim(s) <u>1-7</u> is/are pending in the application.							
,—	4a) Of the above claim(s) <u>2-5 and 7</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1 and 6</u> is/are rejected.	· · · · · · · · · · · · · · · · · · ·						
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	election requirement						
	election requirement.						
Application Papers							
9)☐ The specification is objected to by the Examine							
10)☐ The drawing(s) filed on is/are: a)☐ acce	epted or b) $\square$ objected to by the E	Examiner.					
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 7/3/08;4/21/08;3/11/08;7/1006.	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:	ite					

### **DETAILED ACTION**

#### Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1 and 6, drawn to a product of a hot dip galvanized high strength sheet.

Group II, claim(s) 2-5 and 7, drawn to a method of production of hot dip galvanized high strength sheet.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: they lack the same of unity a posteriori because the common feature of "a hot dip galvanized high strength sheet" with specific composition as recited in the instant claim 1 is known in the art. EP 1 160 346 A1 (thereafter EP'346) discloses a high strength galvanized steel with the composition ranges (Title, abstract, claims 1-12 of EP'346) overlap the composition ranges as claimed. Invention I-II lacks the same or corresponding special technical feature. Therefore unity of invention is lacking and restriction is appropriate.

A telephone call was made to John J. Kelly Jr. on 1/8/2009 to request an oral election to the above restriction requirement and result in applicant's election with traverse. Claims 2-5 and 7 were withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions. Claims 1 and 6 are pending for examination. Regarding the Applicants' traverse for the restriction, as discussed above, the requirement is still deemed proper and is therefore made FINAL.

The examiner has required restriction between product and process claims.

Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder.

All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during

in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claim 1, the composition ranges of the claimed alloy are indefinite without unit (a mass percentage should be cited in view of claim 6). Proper correction is needed.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takada et al (EP 1 160 346 A1, thereafter EP'346).

Regarding claims 1 and 6, EP'346 teaches a high strength galvanized steel plate excellent in adhesion of plating and press working formability (title, abstract of EP'346). The composition comparison between the alloy of EP'346 (Abstract, claims 1-12, and Page 3, paragraphs [009]-[0010] of EP'346) and the instant application is listed in the following table. All the composition ranges disclosed by EP'346 overlap the composition ranges of the instant claims, which is a prima facie case of obviousness. SEE MPEP 2144.05 I. It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the compositions of C, Si, Mn, P, S, Al, Mo, N, Fe as claimed in the instant claim 1 and further adding Ti, Nb, V, Cu, Ni, Cr, and B as claimed in the instant claim 6 from the composition disclosed by EP'346, because EP'346 discloses the same utility throughout the disclosed ranges. EP'346 teaches 2vol.% to 20vol.% retained austenite and the structure also includes ferrite, bainite, and martensite (Page 6, paragraph [0024] of EP'346), which overlaps the 5vol.% or

more residual austenite and reads on the ferrite, bainite and martensite structure as recited in the instant claim 1. EP'346 further teaches the phase control by holding at different anneal temperature and time period (Page 7, paragraph [0033] to Page 8, paragraph [0042] of EP'346). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to control the working and annealing conditions as demonstrated by EP'346 in order to obtain a desired microstructures.

Element	From instant Claim 1	EP'346(in wt%)	Overlapping range
	(in wt%)	(ref. Abstract, Cl.1-12)	(in wt%)
С	0.08-0.35	0.05-0.2	0.08-0.2
Si	1.0 or less	0.2-2.0	0.2-1.0
Mn	0.8-3.5	0.2-2.5	0.8-2.5
Р	0.03 or less	<0.03	<0.03
S	0.03 or less	<0.02	<0.02
Al	0.25-1.8	0.01-1.5	0.25-1.5
Мо	0.05-0.35	<0.5	0.05-0.35
N	0.010 or less	<0.03	0.01 or less
	Claim 6		
Ti	0.01-0.03	<0.06	0.01-0.03
Nb	0.01-0.03	<0.06	0.01-0.03
V	0.01-0.03	<0.3	0.01-0.06
Cu	1 or less	<2	1 or less
Ni	1 or less	0.5-5.0	0.5-1
Cr	1 or less	<1	<1
В	0.0001-0.0030	0.0002-0.01	0.0002-0.003
Fe	Balance	Balance	Balance

### **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

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unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 6 are provisionally rejected on the ground of nonstatutory obviousness type double patenting as being unpatentable over claims 1-7 of copending application No. 10/560989 in view of EP'346.

Although the conflicting claims are not identical, they are not patentable distinct from each other because, the instant claims and the conflicting claims define substantially the same high strength galvanized steel sheet. Claims 1-7 of copending application No. 10/560989 teaches the steel sheet containing ferrite and martensite structure as recited in the instant claims. Claims 1-7 of copending application No. 10/560989 does not specify the 5vol.% or more residual austenite and bainite

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phase, EP'346 further teaches the phase control by holding at different anneal temperature and time period (Page 7, paragraph [0033] to Page 8, paragraph [0042] of EP'346). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to control the working and annealing conditions as demonstrated by EP'346 in the alloy taught by claims 1-7 of copending application No. 10/560989 in order to obtain a desired microstructures (Page 7, paragraph [0033] to Page 8, paragraph [0042] of EP'346). Thus, no patentable distinction is seen between the alloy of the instant claims and that of the claims of copending application No. 10/560989 in view EP'346.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1 and 6 are provisionally rejected on the ground of nonstatutory obviousness type double patenting as being unpatentable over claims 1-10 of copending application No. 10/558579 in view of EP'346.

Although the conflicting claims are not identical, they are not patentable distinct from each other because, the instant claims and the conflicting claims define substantially the same high strength galvanized steel sheet. Claims 1-10 of copending

application No.10/558579 teaches the steel sheet containing not more than 7Vol.% residual austenite which overlaps the claimed 5vol.% or more residual austenite as recited in the instant claims. Claims 1-10 of copending application No. 10/558579 does not specify structure of ferrite, martensite and bainite, EP'346 further teaches the phase control by holding at different anneal temperature and time period (Page 7, paragraph [0033] to Page 8, paragraph [0042] of EP'346). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to control the working and annealing conditions as demonstrated by EP'346 in the alloy taught by claims 1-10 of copending application No.10/558579 in order to obtain a desired microstructures (Page 7, paragraph [0033] to Page 8, paragraph [0042] of EP'346). Thus, no patentable distinction is seen between the alloy of the instant claims and that of the claims of copending application No. 10/558579 in view EP'346.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1 and 6 are provisionally rejected on the ground of nonstatutory obviousness type double patenting as being unpatentable over claims 1-3 of copending application No. 10/591919 in view of EP'346.

Although the conflicting claims are not identical, they are not patentable distinct from each other because, the instant claims and the conflicting claims define substantially the same high strength galvanized steel sheet. Claims 1-3 of copending application No.10/591919 teaches the steel sheet containing ferrite and by area ratio 5% to 60% of tempered martensite which overlaps the claimed 0.5-10vol% martensite as recited in the instant claims. Claims 1-3 of copending application No. 10/591919 does not specify structure of austenite and bainite, EP'346 further teaches the phase control by holding at different anneal temperature and time period (Page 7, paragraph [0033] to Page 8, paragraph [0042] of EP'346). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to control the working and annealing conditions as demonstrated by EP'346 in the alloy taught by claims 1-3 of copending application No. 10/591919 in order to obtain a desired microstructures (Page 7, paragraph [0033] to Page 8, paragraph [0042] of EP'346). Thus, no patentable distinction is seen between the alloy of the instant claims and

that of the claims of copending application No. 10/591919 in view EP'346.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jie Yang whose telephone number is 571-2701884.

The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-2721244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Roy King/ Supervisory Patent Examiner, Art Unit 1793